

Read Me Document for “Climate-Change Pledges, Actions and Outcomes”

Note: Stata do-files have been tested on Stata SE 16 for Windows.

File descriptions:

1. “policy_analysis.dta”

Main dataset used for generation of all Tables and Figures aside from Table1, Table2 and Table 6.

Variable name	Description	Source
country	Country name	
cntry	Country name encoded	
CountryCode	Country code	
year	Year	
wbregion	Region defined by World Bank	WDI (World Bank 2020)
Incomegroup	Income group defined by World Bank	
total_fossil_co2_percapita	Total fossil CO2 emissions per capita	EDGAR (Crippa et al 2019)
total_fossil_co2_emissions	Total fossil CO2 emissions	
cum_policies	Number of climate related policies in force	Created using Climate Laws of the World Database (Grantham Institute 2020)
cum_laws	Number of climate related laws in force	
cum_adaptation_policies	Number of laws/policies related to adaptation in force	
cum_demand_policies	Number of laws/policies related to demand in force	
cum_supply_policies	Number of laws/policies related to supply in force	
cum_institution_policies	Number of laws/policies related to institutional arrangements in force	
cum_transport_policies	Number of laws/policies related to transport in force	
cum_lulucf_policies	Number of laws/policies related to LULUCF in force	
cum_randd_policies	Number of laws/policies related to R&D in force	
cum_CP_policies	Number of laws/policies related to carbon prices in force	
cum_ETS	Number of ETS at national level in force	Created using Carbon Pricing Dashboard (World Bank 2020)
cum_CT	Number of carbon taxes at national level in force	
cum_ETS_sn	Number of ETS at sub-national level in force	
cum_CT_sn	Number of carbon taxes at sub-national level in force	
upperbound1	Emissions target for end year of CA	Computed using
GHG_total_start1	GHG emissions in start year of CA	

rel_reduction_high1	Conditional targeted reduction from start year (% of start year emissions) for CA	information from various sources
rel_reduction_low1	Unconditional targeted reduction from start year (% of start year emissions) for CA	
partytopledge1	Party to CA	
upperbound2	Emissions target for end year of KP	
GHG_total_start2	GHG emissions in start year of KP	
rel_reduction_high2	Conditional targeted reduction from start year (% of start year emissions) for KP	
rel_reduction_low2	Unconditional targeted reduction from start year (% of start year emissions) for KP	
partytopledge2	Party to KP	
upperbound3	Emissions target for end year of PA	
GHG_total_start3	GHG emissions in start year of PA	
rel_reduction_high3	Conditional targeted reduction from start year (% of start year emissions) for PA	
rel_reduction_low3	Unconditional targeted reduction from start year (% of start year emissions) for PA	
partytopledge3	Party to PA	
GHG_percapita	GHG emissions per capita	EDGAR (Crippa et al 2019)
GHG_total	Total GHG emissions	
GHG_inclLULUCF	GHG emissions	CAIT (WRI 2017)
GDP	GDP	WDI (World Bank 2020)
GDP_growth	GDP growth annual	
GDP_percapita	GDP per capita	
population	Population	
urban_pop	Urban population (%)	
oil_rents	Oil rents (% of GDP)	
cpi_inflation	CPI inflation (%)	

2. “quantified_pledges.dta”

Information on targets compiled using information from UNFCC 2008, 2010 and 2011 (for Kyoto and Copenhagen), WRI 2016 (for Paris).

EU country-level breakdown of targets obtained from European Commission (2020) and EU (2020).

Comparable targets are computed using emissions in starting year (GHG emissions taken from CAIT), estimates of BAU scenarios where applicable (from WRI 2015, Fenhann 2019, WRI 2018 and Climate Analytics and New Climate Institute 2020).

Variable	Description
country	Country name
Pledge	Name of pledge
Party	Country is party to the pledge
Unit	Unit in which target is expressed
Baseline	Baseline year against which target is specified
QuantifiedObjective	Reduction amount specified
Sector	Sector used as baseline for emission reduction E: Energy, A: Agriculture, W: Waste, LULUCF: Land use change, F: Land use, I: Industrial, T: Transport
target_low	Unconditional targeted level of emissions for end year (can be Sector specific)
target_high	Conditional targeted level of emissions for end year (can be Sector specific)
GHG_total_start	Total GHG emissions in starting year of pledge
start_emissions	GHG emissions in targeted sector in starting year of pledge
abso_reduction_high	Conditional targeted reduction in emissions (sector specific) (start_emissions - target_high)
abso_reduction_low	Unconditional targeted reduction in emissions (sector specific) (start_emissions - target_low)
rel_reduction_high	Conditional targeted reduction (% of start year GHG emissions) (abso_reduction_high/GHG_total_start)
rel_reduction_low	Unconditional targeted reduction (% of start year GHG emissions) (abso_reduction_low/GHG_total_start)

This data is merged to the main dataset “policy_analysis.dta”. However, this dataset is used to produce Table 3 as the country list is slightly different.

3. “climate_laws_merge.dta”

Constructed using the Grantham Institute’s Climate Change Laws of the World Database (2020).

Number of climate-related laws and policies passed each year by country and area of intervention.

This data is merged into the main dataset “policy_analysis.dta”. However, this dataset is used to produce the summaries in Tables 5 and 6 as the country list is slightly different.

4. “code_file.do”

Stata program for replicating all Tables and Figures in the paper using the three datasets described above.